BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

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COMBINED APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 41K 30149892 AND APPLICATION TO CHANGE AN EXISTING NON-IRRIGATION WATER RIGHT NO. 41K 30149891 BY JOE AND GLENDA HORNER	)))))	**PRELIMINARY DETERMINATION TO GRANT COMBINED APPLICATION**

On February 4, 2021, Joe and Glenda Horner (Applicants) submitted a combined Application for Beneficial Water Use Permit No. 41K 30149892 and Application to Change an Existing Non-Irrigation Water Right No. 41K 30149891 to the Lewistown Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The proposed appropriation (temporary permit) is to divert groundwater for industrial purposes at a gravel washing operation, and the proposed temporary change is for mitigating depletions to surface water caused by the groundwater appropriation. The Department published receipt of the Application on its website. The Department sent Applicant a deficiency letter for each application under § 85-2-302, Montana Code Annotated (MCA), dated June 29, 2021. The Applicant responded with information dated July 8, 2021. The Application was determined to be correct and complete as of August 12, 2021. An Environmental Assessment for this Application was completed on September 15, 2021.

INFORMATION

The Department considered the following information submitted by the Applicants, which is contained in the administrative record.

Permit application as filed:

- Application for Beneficial Water Use Permit, Form 600, including supplemental narrative
- Map displaying the elements of the proposed permit
- Site map
- Geologic map

- Pump Curve (Applicant's Attachment A)
- Copy of the Department's October 28, 2020 Memo granting a variance from aquifer testing requirements
- Hydrogeologic Assessment Report Addendum, including supplement to the Addendum
- Basin Closure Area Addendum

Change application as filed:

- Application to Change an Existing Non-Irrigation Water Right, Form 606, including supplemental narrative
- Maps displaying elements of the existing water right to be changed and proposed use
- Change in Purpose Addendum
- Temporary Change Addendum

Information Received after Application Filed

- Emails from Applicant's consultant clarifying aspects of the applications
    - Email from Hydrosolutions, dated April 19, 2021, regarding DEQ research of reclamation release records for the Applicant's abandoned pit
    - Email from HydroSolutions, dated May 11, 2021 clarifying the proposed period of diversion
    - Email from HydroSolutions, dated June 30, 2021 regarding standards for consumptive use from an industrial wash plant

Information within the Department's Possession/Knowledge

- Technical Reports
- Aquifer Test Report
- Depletion and Mitigation Report
- Water right records, including but not limited to, the file for the Statement of Claim to be changed

- Memo from Scott Irvin, dated February 5, 2021, Determination for Basin Closure Compliance
- Memo from Scott Irvin, dated April 19, 2021, Compliance with Revised Gravel Pit Policy

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, MCA).

BASIN CLOSURE

FINDINGS OF FACT

1. The permit application is for industrial purposes. The application is located within the Upper Missouri River Basin Closure Area.

2. Applicants submitted a hydrogeologic assessment and Basin Closure Addendum with their permit application.

CONCLUSIONS OF LAW

3. DNRC cannot grant an application for a permit to appropriate water within the upper Missouri River basin until final decrees have been issued in accordance with Title 85, chapter 2, part 2, MCA, for all of the sub-basins of the upper Missouri River basin. § 85-2-343(1), MCA. The upper Missouri River basin consists of the drainage area of the Missouri River and its tributaries above Morony Dam. (§ 85-2-342(4), MCA). The proposed appropriation is located within the Upper Missouri River Basin Closure Area. The proposed source is groundwater. The application falls under the exceptions for the basin closure, 85-2-343, MCA.

4. Pursuant to § 85-2-362, MCA, a combined application for a new appropriation of groundwater in a closed basin shall consist of a hydrogeologic assessment with an analysis of net depletion, a mitigation plan or aquifer recharge plan if required, an application for a beneficial water use permit or permits, and an application for a change in appropriation right or rights if

necessary. A combined application must be reviewed as a single unit. A beneficial water use permit may not be granted unless the accompanying application for a change in water right is also granted. A denial of either results in a denial of the combined application. § 85-2-363, MCA. ARM 36.12.120. E.g., *In the Matter of Application No. 76H-30046211 for a Beneficial Water Use Permit and Application No.76H-30046210 to Change a Non-filed Water Right by Patricia Skergan and Jim Helmer* (DNRC Final Order 2010, Combined Application)(combined application under §85-2-363, MCA, reviewed as a single unit).

5. In reviewing an application for groundwater in a closed basin, the District Court in Sitz Ranch v. DNRC observed:

> The basin from which applicants wish to pump water is closed to further appropriations by the legislature. The tasks before an applicant to become eligible for an exception are daunting. The legislature set out the criteria discussed above (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting. It is inescapable that an applicant to appropriate water in a closed basin must withstand strict scrutiny of each of the legislatively required factors.

Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7.

A basin closure exception does not relieve the Department of analyzing § 85-2-311, MCA criteria. Qualification under a basin closure exception allows the Department to accept an application for processing. The Applicant must still prove the requisite criteria. E.g., *In The Matter of Application for Beneficial Water Use Permit No. 41K-30043385 by Marc E. Lee* (DNRC Final Order 2011); *In The Matter of Application for Beneficial Water Use Permit No. 41K-30045713 by Nicholas D. Konen*, (DNRC Final Order 2011)

§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

GENERAL CONCLUSIONS OF LAW

6. The Montana Constitution expressly recognizes in relevant part that:

(1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
(2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
(3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, §3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

(1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
(3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

7. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See § 85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

… the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:
(a) (i) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; and
(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined

using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

(b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) the applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit;

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permitholder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, "the applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies." § 85-2-311(5), MCA (emphasis

added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is required to grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Id. A preponderance of evidence is "more probably than not." Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35.

8. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

> (1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, "uncontrolled development of a valuable natural resource" which "contradicts the spirit and purpose underlying the Water Use Act."); see also, *In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers* (DNRC Final Order 1988)(conditions in stipulations may be included if in further compliance with statutory criteria); *In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick* (DNRC Final Order 1994); Admin R. Mont. (ARM) 36.12.207.

9. The Montana Supreme Court further recognized in Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starner (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

> Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional

> permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order* (2011). The Supreme Court likewise explained that:

> .... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

10. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. § 85-2-311(6), MCA.

11. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

CONCURRENT PROCEEDINGS

FINDINGS OF FACT

12. The proposed permit and change applications are being considered under a concurrent proceeding as directed in § 85-2-360, MCA. Statute requires that an aquifer recharge or mitigation plan (change application) accompany a proposed groundwater appropriation (permit

application) in a closed basin if a surface water net depletion caused by the groundwater appropriation causes adverse effect on a prior appropriator.

PROPOSED APPROPRIATION

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 41K 30149892

FINDINGS OF FACT

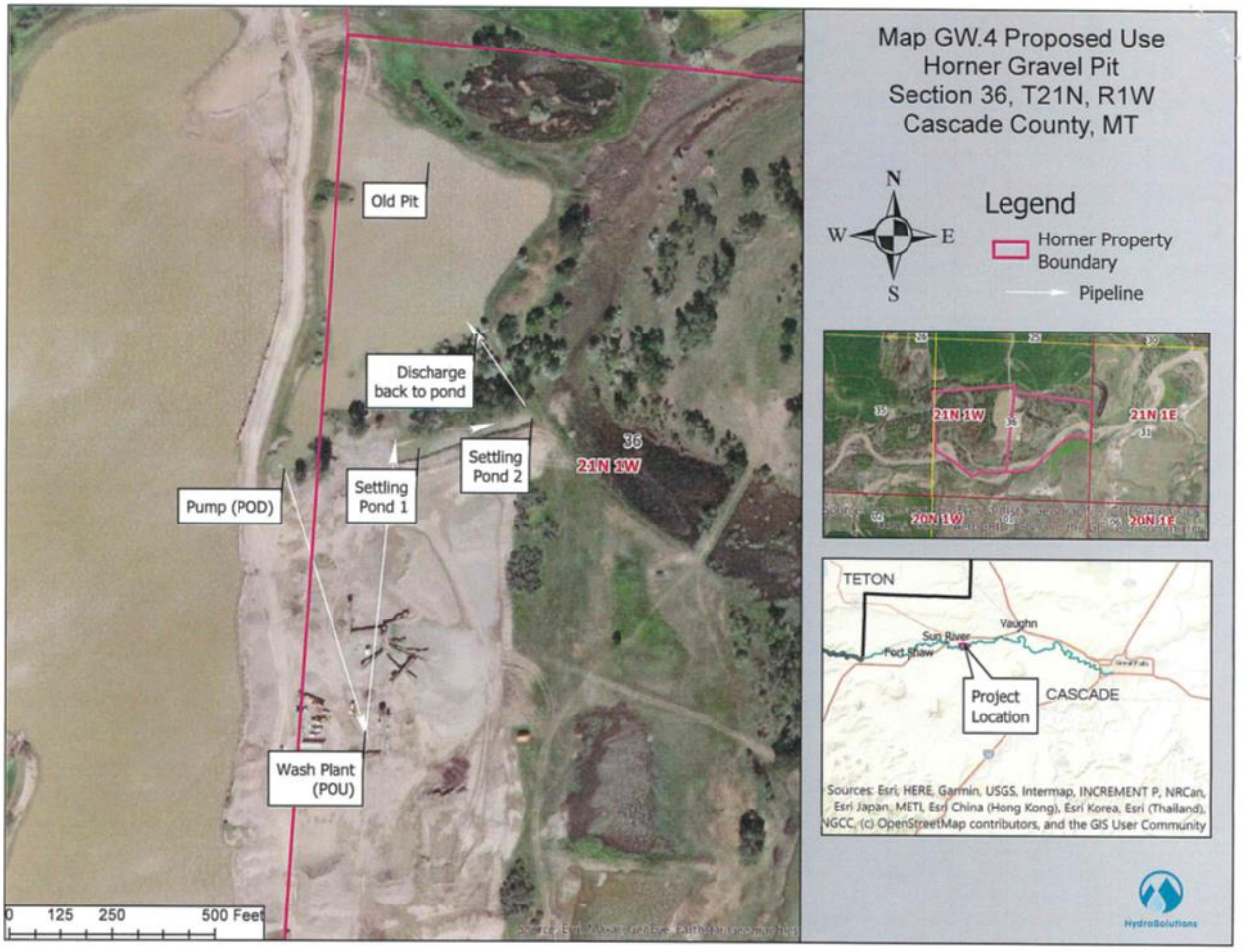
13. Applicants propose to divert groundwater under a 20-year temporary permit, from an unconfined gravel and sand aquifer in the Quaternary alluvial sediments of the Sun River Valley. The project is located 2 miles east of the town of Sun River, Montana. The means of diversion is a pump that appropriates groundwater from an old gravel pit (inactive gravel pit) excavated into the shallow aquifer. The inactive pit is located in the S2N2 Section 36, T21N, R1W, and the pumping station is situated in the southern portion of the pit in the SESENW Section 36. The pumping pit has existed on the property for decades and is no longer mined for gravel. Water will be diverted from the old pit at a flow rate of 400 gallons per minute (GPM) and volume of up to 65.4 acre-feet (AF), from March 15 through December 1. Water will be used for industrial purposes from March 15 through December 1, to wash gravel mined from an active, adjacent pit. The gravel mining operation is permitted under Montana Department of Environmental Quality Opencut Permit No. 1868. The gravel wash plant, or the place of use, is in the NWSE Section 36, T21N, R1W. Application.

14. General operation of the diversion works and other facilities includes pumping groundwater from the pit at a rate of 400 GPM. Water is conveyed through a pipeline to the gravel wash plant. After serving its purpose of gravel washing (Industrial purpose), excess water is collected at the plant and cycled through a series of two settling ponds, and back into the pit it was initially diverted from. Application.

15. The point of diversion is located approximately 1,500 feet east of Mill Coulee Creek and 1,800 feet north of the Sun River. The source of the appropriation (shallow groundwater aquifer) is hydraulically connected to Mill Coulee Creek and the Sun River. Application; Department Depletion and Mitigation Report.

16. The consumptive volume of the proposed appropriation is calculated to be 1.84 AF. Application; Department Technical Report.

Following is a copy of the Applicants' map of the proposed appropriation site and facilities.



Physical Availability

FINDINGS OF FACT

17. The source is shallow groundwater to be diverted from an unconfined gravel and sand aquifer in the Quaternary alluvial sediments of the Sun River Valley. The aquifer is generally 20-30 feet deep in the vicinity of the project, with a width of about 1.5 miles. Recharge to the source aquifer is primarily from irrigation return flows, stream losses, ditch leakage, and precipitation. The proposed appropriation is a flow rate of 400 GPM and diverted volume of up to 65.4 AF annually. Groundwater will be pumped from an existing, 20-foot deep, inactive gravel pit, from March 15 through December 1 annually. Department Depletion and Mitigation Report; Application.

18. On October 28, 2020 the Department granted a variance for Aquifer Testing Requirements to the Applicants. The testing procedures outlined in Administrative Rule 36.12.121 were waived due to the difficulty of obtaining accurate aquifer properties from an open pit using standard testing methods. Department October 28, 2020 Memo granting a variance from aquifer testing requirements; File.

19. Applicants have operated the pumping system in the pit for 4 years under the pumping scheduled proposed under the permit application (400 GPM, for 6 hours per day, 37 weeks per year). Their on-site observations are that the exposed groundwater level in the pit drops 3-4 inches for one day's pumping operation, then fully recovers by the following day. Application.

20. Department Groundwater Hydrologist Attila Folnagy assessed physical water availability by calculating groundwater flux through the zone of influence (ZOI) corresponding to the 0.01-foot drawdown contour. Groundwater flux is the rate of discharge or flow of groundwater through a porous or fractured media. Folnagy modeled the groundwater pit as one large diameter well using the Theis Solution with the following parameters: transmissivity of 3,692 ft^2/day; storativity of 0.1; constant pumping rate of 56.5 GPM (equivalent to the requested volume of 65.4 AF converted to flow rate and averaged over the period of diversion); and constant head boundaries representing Mill Coulee Creek and the Sun River. Aquifer Test Report. The

calculation resulted in groundwater flow or flux through the ZOI of 51,983 ft^3/day, or 435.6 AF annually. Groundwater flux through the ZOI exceeds the proposed appropriation of 65.4 AF.

21. The Department's modeling efforts and Applicants' industrial operations for the last 4 years show that groundwater is physically available in the amount of the proposed appropriation.

CONCLUSIONS OF LAW

22. Pursuant to § 85-2-311(1)(a) (i), MCA, an applicant must prove by a preponderance of the evidence that "there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate."

23. An applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson* (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean* (DNRC Final Order 1994).

24. The Applicants have proven that water is physically available at the proposed point of diversion in the amount they seek to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF 17-21)

Legal Availability

FINDINGS OF FACT

25. Groundwater – Based on groundwater drawdown to the 0.01-foot contour, the predicted average width of the zone-of-influence is 6,400 feet, as truncated by the alluvial sediment contact to the north, Mill Coulee Creek to the west, and the Sun River the south. Groundwater flux through the ZOI is calculated to be 435.6 AF per year. Department Aquifer Test Report.

26. According to Department records, there are four groundwater rights within the ZOI. The four groundwater rights have a combined annual appropriation of 41.01 AF. Department Technical Report.

Table 1: Groundwater Rights within the Zone-of-Influence

Water Right No.	Owner(s)	Diverted Volume (AF)
41K 75791	P.M. & S.D Reeverts	8.0
41K 30068615	Glenda & Joe Horner	0.01
41K 210537	Stevie Neuman	12.0
41K 210539	Stevie Neuman	21.0
Total		41.01 AF

In comparison, the estimated flux through the ZOI, or volume of water physically available annually, is 435.6 AF, leaving 394.6 AF legally available. Department Technical Report.

27. The Department finds groundwater is legally available in the amount proposed for appropriation.

28. Surface Water – The source aquifer is the Quaternary alluvial sediments of the Sun River Valley. The point of diversion (pumping system) is located approximately 1,500 feet east of Mill Coulee Creek and 1,800 feet north of the Sun River. The locations of potentially affected surface waters depend on propagation of drawdown to locations where surface water is hydraulically connected to groundwater. According to Department Groundwater Hydrologist Attila Folnagy, water levels in the pumping pit are similar to the surface elevation of Mill Coulee Creek and the Sun River, and the shallow groundwater source is hydraulically connected to both sources. Folnagy's predicted impacted reach of Mill Coulee Creek is located near its confluence with the Sun River, in the W2SW Section 36, T21N, R1W. The impacted reach of the Sun River is through the S2 Section 36, T21N, R1W, downstream to the NWNE Section 31, T21N, R1E. Department Depletion and Mitigation Report.

29. Folnagy modeled the rate and timing of net depletions (1.84 AF) to Mill Coulee Creek and the Sun River using the Alluvial Water Accounting System (AWAS). The following table displays the modeled depletions.

Table 2: Predicted Depletions to Mill Coulee Creek and the Sun River

Month	New Consumption (AF)	Net Depletion to Mill Coulee Cr. (AF)	Net Depletion to Sun River (AF)	Total Net Depletion to Sun River downstream of Mill Coulee Cr. (AF)
January	0.00	0.06	0.05	0.12
February	0.00	0.05	0.04	0.09
March	0.12	0.05	0.04	0.09
April	0.21	0.07	0.05	0.12
May	0.22	0.09	0.06	0.15
June	0.21	0.10	0.07	0.17
July	0.22	0.11	0.07	0.18
August	0.22	0.11	0.07	0.18
September	0.21	0.11	0.08	0.19
October	0.22	0.11	0.08	0.19
November	0.21	0.11	0.08	0.19
December	0.01	0.10	0.07	0.17
Total	1.84	1.09	0.75	1.84

30. According to Department records, there are no water rights on Mill Coulee Creek in the reach where depletions will occur. Therefore, water is legally available within the impacted area of Mill Coulee Creek. Water right records.

31. All Total Net Depletions displayed in Table 2 (last column) will accrue to the Sun River (1.84 AF). The closest stream gauge to compare legal demands to stream discharge is located about 12 linear miles upstream at Simms, Montana (U.S. Geological Survey Gage No. 06085800). Table 3 displays median of the mean monthly discharge for the Simms stream gage for its 54-year period of record (with the exception of no gaging from 1979 to 1997). Stream discharge ranges from 130.2 CFS to 1,419.5 CFS in flow rate; and volume from 7,747 AF to 84,466 AF. Department Technical Report.

Table 3: Median of Mean Monthly Flows and Volumes for Sun River at Simms, MT (USGS Gage No. 06085800)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flow (CFS)	183.2	198.9	183.8	255.7	977.8	1419.5	176.5	131.5	130.2	191.2	207.2	177.7
Vol (AF)	11265	11441	11301	15215	60120	84466	10853	8086	7747	11753	12329	10926

32. Table 4 displays a list of water rights on the Sun River between USGS Gage No. 06085800 and the depleted reach of stream (through the NWNE Section 31, T21N, R1E). Department Technical Report.

Table 4: Water Rights on the Sun River from USGS Gage through Depleted Reach

41K 208264 00	41K 208741 00	41K 200201 00	41K 210513 00	41K 208423 00
41K 208763 00	41K 208751 00	41K 200202 00	41K 210514 00	41K 208424 00
41K 30017592	41K 30112682	41K 200419 00	41K 210515 00	41K 123546 00
41K 30136312	41K 209140 00	41K 200420 00	41K 210516 00	41K 200628 00
41K 200300 00	41K 199334 00	41K 210509 00	41K 199335 00	41K 208775 00
41K 200369 00	41K 200198 00	41K 28874 00	41K 199336 00	
41K 208739 00	41K 200200 00	41K 6729 00	41K 199347 00	

33. Table 5 displays a monthly comparison of the estimated physical water supply in the Sun River (Table 3) and existing legal demands (accounting of flow rates and volumes from the list of water rights displayed in Table 4). Department Technical Report.

Table 5: Comparison of Water Physically Available in Sun River to Monthly Legal Demands between USGS Gage and Section 31, T21N, R1E

Month	Estimated Physical Availability (CFS)	Existing Legal Demands (CFS)	Physically Available – Existing Legal Demands (CFS)	Estimated Physical Availability (AF)	Existing Legal Demands (AF)	Physically Available – Existing Legal Demands (AF)
January	183.2	130.7	52.5	11,264.5	8,001.8	3,262.7
February	198.9	130.7	68.2	11,440.9	7,485.6	3,955.3
March	183.8	133.8	50.0	11,301.4	8,188.1	3,113.3
April	255.7	330.0	-74.3	15,215.2	19,601.3	-4,386.1
May	977.8	352.0	625.8	60,119.5	21,605.9	38,513.6
June	1,419.5	352.0	1067.5	84,466.1	20,909.2	63,556.9
July	176.5	352.0	-175.5	10,852.6	21,605.9	-10,753.3
August	131.5	351.9	-220.4	8,085.6	21,601.6	-13,516.0
September	130.2	347.9	-217.7	7,747.4	20,667.1	-12,919.7
October	191.2	346.4	-155.2	11,753.4	21,262.2	-9,508.8
November	207.2	295.3	-88.1	12,329.3	17,539.5	-5,210.2
December	177.7	130.9	46.8	10,926.3	8,010.4	2,915.9

34. The data in Table 5 show that water is legally available in the assessed reach of the Sun River during the months of January, February, March, May, June, and December. Water is not legally available in the stream reach (legal demands exceed stream discharge), on a monthly basis, during April, July, August, September, October, and November. This comparison analysis only considers the stream reach between the USGS gage and the immediate depleted reach, an approximate 12-mile segment. The Sun River is tributary to the Missouri River, and the Missouri River basin is legislatively closed to all new appropriations, with few exceptions, year-round. The Missouri River basin is over-allocated during most months of the year and can be legally unavailable in any given month (depending on the timing of spring runoff).

35. Concurrent with this permit application proceeding, the Applicants filed an application to change existing water right number 41K 200369. Change Application No. 41K 30149891 proposes to mitigate or offset the full depletion of 1.84 AF to the Sun River by reducing the number of stock (AUs) watering from the source. Mitigation is successfully executed when the Applicants reduce their stock units commensurate to the monthly volume consumed under their permit appropriation. Applicant has addressed legal availability of surface water by providing a mitigation plan which proposes to mitigate depletions to surface water in full. This mitigation plan is fully addressed under "Adverse Effect" below. Application file.

36. Based on the Applicant's plan to fully mitigate depletions to the Sun River by reducing the size of the stock herd, the Department finds that surface water is legally available. Administrative Rule of Montana 36.12.1704(1)(a).

CONCLUSIONS OF LAW

37. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of

potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

E.g., ARM 36.12.101 and 36.12.120; Montana Power Co., 211 Mont. 91, 685 P.2d 336 (permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

38. It is the applicant's burden to present evidence to prove water can be reasonably considered legal available. E.g., Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting.); see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005))(it is the applicant's burden to produce the required evidence.); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007)(permit denied for failure to prove legal availability); see also ARM 36.12.1705.

39. Pursuant to Montana Trout Unlimited v. DNRC, 2006 MT 72, 331 Mont. 483, 133 P.3d 224, the Department recognizes the connectivity between surface water and groundwater and the effect of pre-stream capture on surface water. E.g., Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 7-8; *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006)(mitigation of depletion required), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); see also Robert and Marlene Takle v. DNRC *et al.*, Cause No. DV-92-323, Montana Fourth Judicial District for

Ravalli County, *Opinion and Order* (June 23, 1994) (affirming DNRC denial of Applications for Beneficial Water Use Permit Nos. 76691-76H, 72842-76H, 76692-76H and 76070-76H; underground tributary flow cannot be taken to the detriment of other appropriators including surface appropriators and groundwater appropriators must prove unappropriated surface water, *citing* Smith v. Duff, 39 Mont. 382, 102 P. 984 (1909), and Perkins v. Kramer, 148 Mont. 355, 423 P.2d 587 (1966)); *In the Matter of Beneficial Water Use Permit No. 80175-s76H by Tintzman* (DNRC Final Order 1993)(prior appropriators on a stream gain right to natural flows of all tributaries in so far as may be necessary to afford the amount of water to which they are entitled, *citing* Loyning v. Rankin (1946), 118 Mont. 235, 165 P.2d 1006; Granite Ditch Co. v. Anderson (1983), 204 Mont. 10, 662 P.2d 1312; Beaverhead Canal Co. v. Dillon Electric Light & Power Co. (1906), 34 Mont. 135, 85 P. 880); *In the Matter of Beneficial Water Use Permit No.* 63997-*42M by Joseph F. Crisafulli* (DNRC Final Order 1990)(since there is a relationship between surface flows and the groundwater source proposed for appropriation, and since diversion by applicant's well appears to influence surface flows, the ranking of the proposed appropriation in priority must be as against all rights to surface water as well as against all groundwater rights in the drainage.) Because the applicant bears the burden of proof as to legal availability, the applicant must prove that the proposed appropriation will not result in prestream capture or induced infiltration to limit its analysis to groundwater. § 85-2-311(a)(ii), MCA. Absent such proof, the applicant must analyze the legal availability of surface water in light of the proposed groundwater appropriation. *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions LLC* (DNRC Final Order 2007) (permit denied); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5; Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12.

Where a proposed groundwater appropriation depletes surface water, applicant must prove legal availability of amount of depletion of surface water throughout the period of diversion either

through a mitigation /aquifer recharge plan to offset depletions or by analysis of the legal demands on and availability of water in the surface water source. Robert and Marlene Takle v. DNRC *et al.*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006)(permits granted), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007*)*(permit granted), *affirmed*, Montana River Action Network et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions LLC* (DNRC Final Order 2007) (permit denied for failure to analyze legal availability outside of irrigation season (where mitigation applied)); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009)(permit denied in part for failure to analyze legal availability for surface water for depletion); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 (Court affirmed denial of permit in part for failure to prove legal availability of stream depletion of 3 gpm and 9 gpm respectively to slough and Beaverhead River); Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12 ("DNRC properly determined that Wesmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator"; applicant failed to analyze legal availability of surface water where projected surface water depletion from groundwater pumping).

Applicant may use water right claims of potentially affected appropriators as a substitute for "historic beneficial use" in analyzing legal availability of surface water under § 85-2-360(5), MCA. Royston, supra.

40. In analyzing legal availability for surface water, applicant was required to evaluate legal demands on the source of supply throughout the "area of potential impact" by the proposed use under § 85-2-311(1)(a)(ii), MCA, not just within the "zone of influence." Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 6.

41. The Applicants have proven by a preponderance of the evidence that groundwater can reasonably be considered legally available during the period in which they seek to appropriate, in the amount requested. (FOFs 25-27)

42. Based on the Applicants' proposed mitigation plan, the Applicants have proven by a preponderance of the evidence that surface water can reasonably be considered legally available during the period in which they seek to appropriate, in the amount requested. 85-2-311(1)(a)(ii), MCA. (FOFs 28-36)

Adverse Effect

FINDINGS OF FACT

43. The proposed diverted volume is 65.4 AF, as estimated by the following pumping and gravel washing schedule. The schedule includes running the wash plant between the period of March 15 to December 1, for six hours per day, four days per week (37 weeks annually).

400 gpm X 60 min/hr	=	24,000 gal/hr
24,000 gal/hr X 6 hrs/day	=	144,000 gal/day
144,000 gal/day X 4 days/wk	=	576,000 gal/wk
576,000 gal/wk X 37 wks/yr	=	21,312,000 gal/yr
21,312,000 gal/yr ÷ 325,851 gal/acre-foot	=	**65.4 AF Diverted Volume**

44. The consumed volume of 1.84 AF was calculated based on the projected amount of water remaining in the commercial gravel product. During the gravel washing process, water not incorporated in the commercial product is returned to the aquifer through a series of pipes and settling ponds. That part of the water remaining or incorporated into the commercial product is considered consumed. The consumed volume was estimated using industry standards developed

by the Montana Department of Transportation allowing a maximum of 5% of the finished product to be water (5% by weight). This methodology for estimating consumed volume was accepted by the Department in a 2013 Permit proceeding. Permit No. 76M 30062977, by Knife River, Inc. Consumed volume calculations are as follows:

Total tonnage mined and washed per year	=	50,000 tons
Five percent of 50,000 tons (0.5 X 50,000)	=	2,500 tons
2,500 tons of water X 2,000 lbs/ton	=	5,000,000 lbs water
5,000,000 lbs water ÷ 8.33 lbs/gal	=	600,240 gal
600,240 gal ÷ 325,851 gal/AF	=	**1.84 AF Consumptive Volume**

45. Groundwater - The Department granted a variance to the Applicants from aquifer testing requirements because testing as outlined in administrative rules is not feasible on a pumping pit of the size of the Applicants' pit. Department's October 28, 2020 Memo granting a variance from aquifer testing requirements.

46. Per the Departments groundwater modeling, the average width of the ZOI, or the modeled areal extent of groundwater drawdown to the 0.01-foot contour, is 6,400 feet. Legal demands of groundwater rights within the ZOI are 41.01 AF, and the estimated groundwater flux through the zone is 435.6 AF. Flux, or volume of water physically available annually, exceeds legal demands by 394.6 AF. FOF 26; Aquifer Test Report.

47. An evaluation of drawdown in existing wells within the 1-foot drawdown contour was conducted by Department Groundwater Hydrologist Attila Folnagy using the Theis (1935) solution with the following parameters: Transmissivity = 3,692 ft^2/day; Storativity = 0.01; constant head boundaries representing Mill Coulee Creek and the Sun River; and a constant pumping rate of 56.5 gallons per minute (equivalent to the diverted volume of 65.4 AF converted to flow rate and averaged over the period of diversion). The Department's modeling shows that after five years of pumping from the proposed groundwater pit at a constant rate during the period of diversion, drawdown in excess of 1-foot extends 290 feet from the diversion (pump). There is one groundwater right in the source aquifer that is predicted to experience drawdown greater than 1 foot, and the water right is owned by the Applicants in this matter (Horners). The Applicants' appropriation associated with the water right is just 0.01 AF in volume and there is

sufficient groundwater available to satisfy the appropriation. Department Aquifer Test Report; Department Technical Report; water right records.

48. Based on information included in the application, water right records, and Groundwater Hydrologist Folnagy's assessment, the Department finds that groundwater rights will not be adversely affected by the proposed appropriation.

49. Surface Water – Mill Coulee Creek and the Sun River are hydraulically connected to the shallow groundwater source that appropriations will occur from. Depletions of 1.84 AF will accrue to the lowermost reach of Mill Coulee Creek and the Sun River. Depletions to surface water will occur year-round, with slight variations from month to month. Finding of Fact Nos. 29 and 44; Department Depletion and Mitigation Report.

50. There are no water rights in existence in the lower reach of Mill Coulee Creek that will be depleted by the appropriation, and therefore there will be no adverse effects to that source. Water right records.

51. Water is *physically* available in the Sun River in all months of the proposed period of diversion, but it is not *legally* available in April, July, August, September, October, and November. The Missouri River basin, in general, is over-allocated during most months of the year and can be legally unavailable in any given month (depending on the timing of spring runoff). Finding of Fact No. 34.

52. The Applicants' mitigation plan is to offset the full surface water depletion to the Sun River (1.84 AF) by reducing the number of animal units on the property. The stocking rate will be reduced and those stock will no longer have access to water from the Sun River. The Department calculates the number of animal units to be reduced based on a standard daily consumption rate of 30 gallons per day per animal unit. The calculations to reach the mitigation volume (1.84 AF) are as follows:

1.842 AF X 325,851 gal/AF	=	600,240 gal
600,240 gal ÷ 365 days/yr	=	1,644 gal/day
1,644 gal/day ÷ 30 gal/AU	=	**55 AUs**

53. The Applicants are required to reduce their stocking rate by 55 AUs to effectively offset depletions to the Sun River and the Missouri River by the proposed groundwater appropriation. Under water right number 41K 200369 the Applicants historically watered 461 AUs from the Sun River. After reducing their herd size by 55 AUs, the Applicants can effectively meet the mitigation plan by watering no greater than 406 AUs from the Sun River. The Department has imposed a condition in this Preliminary Determination limiting the stocking rate to 406 AUs. Conditions Section.

54. Based on the Applicants' plan to reduce their stocking rate associated with 41K 200369 to mitigate depletions to the Sun River and the Missouri River, the Department finds there will be no adverse effect to other surface water rights. The Preliminary Determination for the proposed change to 41K 200369 follows the analysis for this Permit application.

CONCLUSIONS OF LAW

55. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co. (1984), 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); Bostwick Properties, Inc. ¶ 21.

56. An applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. Id. ARM 36.12.120(8).

57. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 4.

58. It is the applicant's burden to produce the required evidence. E.g., Id. at Pg. 7(legislature has placed the burden of proof squarely on the applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

59. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a *de minimis* level of adverse effect on prior appropriators. Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pg. 8; see also, *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009) (permit denied).

60. Simply asserting that an acknowledged reduction, however small, would not affect those with a prior right does not constitute the preponderance of the evidence necessary to sustain applicant's burden of proof. Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pg. 11 (Court rejected applicant's argument that net depletion of .15 millimeters in the level of the Bitterroot River could not be adverse effect.); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pgs. 3-4 (Court rejected applicant's arguments that its net depletion (3 and 9 gpm, respectively to Black Slough and Beaverhead River) was "not an adverse effect because it's not measureable," and that the depletion "won't change how things are administered on the source."); *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company (DNRC Final Order 2006*)(adverse effect not required to be measureable but must be calculable)*;* see also Robert and Marlene Tackle v. DNRC *et al.*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994).

After calculating the projected depletion for the irrigation season, the District Court in Sitz Ranch v. DNRC explained:

> Section 85-2-363(3)(d) MCA requires analysis whether net depletion will adversely affect prior appropriators. Many appropriators are those who use surface water. Thus, surface water must be analyzed to determine if there is a net depletion to that resource. Sitz's own evidence demonstrates that about 8 acre-feet of water will be consumed each irrigation season. Both Sitz and any other irrigator would claim harm if a third party were allowed to remove 8 acre-feet of water each season from the source upon which they rely.

Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pgs. 3-4.

61. The Department can and routinely does, condition a new permit's use on use of that special management, technology or measurement such as augmentation now generally known as mitigation and aquifer recharge. See § 85-2-312; § 85-2-360 et seq., MCA; see, e.g., *In the Matter of Beneficial Water Use Permit No. 107-41I by Diehl Development* (DNRC Final Order 1974) (No adverse effect if permit conditions to allow specific flow past point of diversion.); *In the Matter of Combined Application for Beneficial Water Use Permit No. 76H- 30043133 and Application No. 76H-30043132 to Change Water Right Nos. 76H-121640-00, 76H-131641-00 and 76H-131642-00 by the Town of Stevensville* (DNRC Final Order 2011).

62. The Department has a history of approving new appropriations where applicant will mitigate/augment to offset depletions caused by the new appropriation. E.g., *In the Matter of Beneficial Water Use Permit Application Nos. 41H 30012025 and 41H 30013629 by Utility Solutions, LLC*, (DNRC Final Order 2006)(permit conditioned to mitigate/augment depletions to the Gallatin River by use of infiltration galleries in the amount of .55 cfs and 124 AF*), affirmed*, Faust v. DNRC *et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Beneficial Water Use Permit Application Nos. 41H 30019215 by Utility Solutions, LLC, (DNRC Final Order 2007*)(permit conditioned to mitigate 6 gpm up to 9.73 AF of potential depletion to the Gallatin River), *affirmed*, Montana River Action Network v. DNRC, Cause No. CDV-2007-602, Montana First Judicial District Court, (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008)(permit conditioned on mitigation of 3.2 gpm up to 5.18 AF of depletion to the Gallatin River); *In the Matter of Beneficial Water Use Permit Application No. 41I-104667 by Woods and*

Application to Change Water Right No 41I-G(W) 125497 by Ronald J. Woods, (DNRC Final Order 2000); *In The Matter of Application To Change Appropriation Water Right 76GJ 110821 by Peterson and MT Department of Transportation*,(DNRC Final Order 2001); *In The Matter of Application To Change Appropriation Water Right No. 76G-3235699 by Arco Environmental Remediation LLC*.(DNRC Final Order 2003) (allows water under claim 76G-32356 to be exchanged for water appropriated out of priority by permits at the wet closures and wildlife to offset consumption). *In The Matter of Designation of the Larsen Creek Controlled Groundwater Area as Permanent, Board of Natural Resources Final Order* (1988).

Montana case law also provides a history of mitigation, including mitigation by new or untried methods. *See Thompson v. Harvey (1974),154 Mont. 133, 519 P.2d 963; Perkin*s v. Kram*er (1966), 148 Mont. 355, 423 P.2d 587.*

Augmentation/ mitigation is also recognized in other prior appropriation states for various purposes. E.g. C.R.S.A. § 37-92-302 (Colorado); A.R.S. § 45-561 (Arizona); RCWA 90.46.100 (Washington); ID ST § 42-1763B and § 42-4201A (Idaho).

The requirement for mitigation in closed basins has been codified in § 85-2-360, *et seq.*, MCA. Section 85-2-360(5), MCA provides in relevant part:

> A determination of whether or not there is an adverse effect on a prior appropriator as the result of a new appropriation right is a determination that must be made by the department based on the amount, location, and duration of the amount of net depletion that causes the adverse effect relative to the historic beneficial use of the appropriation right that may be adversely affected.

E.g., *Combined Application for Beneficial Water Use Permit No. 76G-30050801 and Change Authorization 76G-30050805 by Missoula County* (DNRC Final Order 2012)(permit granted conditioned on mitigation of depletion ranging .8 to 7.4 gpm); *In the Matter of Application No. 76H-30046211 for a Beneficial Water Use Permit and Application No.76H-30046210 to Change a Non-filed Water Right by Patricia Skergan and Jim Helmer* (DNRC Final Order 2010, Combined Application)(permit granted conditioned on mitigation).

63. If the applicant seeks to use a mitigation plan to prove lack of adverse effect, the applicant must have a defined mitigation proposal at the time of application. It is the Applicant's burden

to come forward with proof at the time the Application is made. The Department cannot approve a permit on this basis of some unidentified proposal that it has no opportunity to evaluate as to whether it successfully allows the Applicant to prove the criteria. Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order,* (2011) Pg. 10 (it was within the discretion of the Department to decline to consider an undeveloped mitigation proposal as mitigation for adverse effect in a permit proceeding); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006) (permits granted based on plan for mitigation of depletion), *affirmed*, Faust v. DNRC *et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007) (permit granted on basis of plan for mitigation of depletion), *affirmed*, Montana River Action Network *et al*. v. DNRC *et al.*, Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); §85-2-360 *et seq.*, MCA.

64. In analyzing adverse effect to other appropriators, an applicant may use the water rights claims of potentially affected appropriators as evidence of their "historic beneficial use." See Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054.

65. Artesian pressure is not protectable and a reduction by a junior appropriator is not considered an adverse effect as long as an appropriator can reasonably exercise his or her water right. See *In re Application No. 72948-G76L by Cross*, (DNRC Final Order 1991); *In re Application No. 75997-G76L by Carr*, (DNRC Final Order 1991);*In the Matter of Application for Beneficial Water Use Permit No. 41S 30005803 by William And Wendy Leininger* (DNRC Final Order 2006)(may have to install pump and worst case scenario objector may run out of water in 80 years held not to be adverse effect); see §§ 85-2-311(1)(b) and -401, MCA.

66. For a permit with mitigation: The Department will evaluate whether an applicant's proposed plan, i.e. mitigation or aquifer recharge, will offset depletions so as to meet § 85-2-

311(1)(b), MCA, in the permit proceeding. The applicant's authority to use the water as proposed is assumed for the purposes of the analysis. The authority of the applicant to use the offset water as proposed for the plan is not determined in the permit proceeding but is determined in any required application for change in appropriation. Whether the applicant proves by a preponderance of the evidence that the mitigation/aquifer recharge plan will be effective is determined in the permit proceeding. Thus, the applicant must accurately convey to the Department exactly what it proposes for a mitigation/aquifer recharge plan. E.g., Wesmont Developers v. DNRC, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pg. 10 (it was within the discretion of the Department to decline to consider an undeveloped mitigation proposal as mitigation for adverse effect in a permit proceeding); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC* (DNRC Final Order 2006), *affirmed*, Faust v. DNRC *et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007) , *affirmed*, Montana River Action Network *et al*. v. DNRC *et al.*, Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); § 85-2-360 *et seq*.

67. Pursuant to § 85-2-363, MCA, an applicant whose hydrogeologic assessment conducted pursuant to § 85-2-361, MCA, predicts that there will be a net depletion of surface water shall offset the net depletion that results in the adverse effect through a mitigation plan or an aquifer recharge plan.

68. Pursuant to § 85-2-362, MCA, a mitigation plan must include: where and how the water in the plan will be put to beneficial use; when and where, generally, water reallocated through exchange or substitution will be required; the amount of water reallocated through exchange or substitution that is required; how the proposed project or beneficial use for which the mitigation plan is required will be operated; evidence that an application for a change in appropriation right, if necessary, has been submitted; evidence of water availability; and evidence of how the

mitigation plan will offset the required amount of net depletion of surface water in a manner that will offset an adverse effect on a prior appropriator.

69. In this case Applicants propose to mitigate its full consumptive use under the proposed appropriation. This mitigation provides mitigation of full depletion of surface waters by the proposed appropriation in amount, location, and duration of the depletion. Because Applicant proposes to mitigate the full amount of its consumptive use, there is no adverse effect from depletion of surface waters to the historic beneficial use of surface water rights. E.g., *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008).

70. The Applicants have proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected by the proposed appropriation as conditioned on Applicants' plan. § 85-2-311(d), MCA. (FOFs 43-54)

Adequate Diversion

FINDINGS OF FACT

71. Groundwater is proposed to be pumped from an inactive gravel pit at a flow rate of 400 GPM up to 65.4 AF annually. Application.

72. The pumping system in the pit is a Berkeley model B3PZL pump powered by a 40-horsepower motor at a capacity of 400 GPM. Water is pumped through 450 feet of 6-inch PVC transmission line to the gravel wash plant. Excess water not incorporated into the mined gravel product is recycled through two settling ponds. From the wash plant water is first delivered to Settling Pond #1, which filters sediments and then flows into Settling Pond #2 through a series of 30' culverts. Water from Settling Pond #2 then drains into the initial pit that groundwater was diverted/pumped from through a 12-inch diameter pipe approximately 250 feet in length. Water is to be diverted between March 15 and December 1, for six hours per day, 4 days per week. The Applicants have operated the diversion facilities for 4 years at the rate and schedule proposed in the permit application. Application.

73. The Department finds the proposed means of diversion, construction, and operation of the appropriation works are adequate.

CONCLUSIONS OF LAW

74. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate. The adequate means of diversion statutory test merely codifies and encapsulates the common law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

75. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. § 85-2-311(1)(c), MCA. (FOFs 71-73)

Beneficial Use

FINDINGS OF FACT

76. The proposed beneficial purpose is Industrial (gravel washing), and the amount of water beneficially used is a flow rate of 400 GPM and diverted volume of 65.4 AF. An estimated 1.84 AF of the diverted volume will be consumed, with the remainder returning to the shallow groundwater aquifer. Application.

77. The flow rate is based on the capacity of the pump and the amount required to sufficiently wash gravel at the wash plant. The Applicants project they will wash 50,000 tons of gravel per year. The volume (65.4 AF) is based on the projected schedule of the gravel washing operation. That schedule includes running the wash plant between the period of March 15 to December 1, for six hours per day, four days per week (37 weeks).

400 gpm X 60 min/hr	=	24,000 gal/hr
24,000 gal/hr X 6 hrs/day	=	144,000 gal/day
144,000 gal/day X 4 days/wk	=	576,000 gal/wk
576,000 gal/wk X 37 wks/yr	=	21,312,000 gal/yr
21,312,000 gal/yr ÷ 325,851 gal/acre-foot	=	**65.4 AF**

78. The Applicants operate their gravel mining operation under Montana Department of Environmental Quality Opencut Permit No. 1868. Application.

79. The Department finds the proposed use of water for industrial purposes to be a beneficial use, and the amount of water needed to sustain the beneficial use is 400 GPM up to 65.4 AF per year.

CONCLUSIONS OF LAW

80. Under § 85-2-311(1)(d), MCA, an applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. An appropriator may appropriate water only for a beneficial use. See also, §§ 85-2-301 and 402(2)(c), MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. E.g., McDonald, supra; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396.

81. The amount of water under a water right is limited to the amount of water necessary to sustain The beneficial use. E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds*, Dee Deaterly v. DNRC *et al*, Cause No. BDV-2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000).

82. Amount of water to be diverted must be shown precisely. Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 3 (citing RPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

83. It is the Applicant's burden to produce the required evidence. *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); see

also Royston; Ciotti; Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7.

84. Applicant proposes to use water for Industrial purposes which is a recognized beneficial use. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence Industrial use is a beneficial use and that 400 GPM and 65.4 AF of water is the amount needed to sustain the beneficial use. (FOF 76-79)

Possessory Interest

FINDINGS OF FACT

85. The Applicants signed the application form affirming they have possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use.

CONCLUSIONS OF LAW

86. Pursuant to § 85-2-311(1)(e), MCA, an applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit.

87. Pursuant to ARM 36.12.1802:

> (1) An applicant or a representative shall sign the application affidavit to affirm the following:
> (a) the statements on the application and all information submitted with the application are true and correct and
> (b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

(2) If a representative of the applicant signs the application form affidavit, the representative shall state the relationship of the representative to the applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.
(3) The department may require a copy of the written consent of the person having the possessory interest.

88. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. § 85-2-402(2)(d), MCA. (FOF 85)

APPLICATION TO CHANGE AN EXISTING NON-IRRIGATION WATER RIGHT NO. 41K 30149891

WATER RIGHT TO BE CHANGED

FINDINGS OF FACT

89. The existing water right to be changed is Statement of Claim No. 41K 200369. Elements of the water right as identified in the Basin 41K Preliminary Decree are as follows.

Table 1: Water Right Proposed for Change

Water Right No.	Source	Purpose	Volume	Priority Date	Point of Diversion & Place of Use	Period of Diversion
41K 200369	Sun River	Stock (Direct from Source)	30 Gal Per Day Per AU	Feb 28, 1940	S2 Sec 36, T21N, R1W	Jan 1 through Dec 31

90. The project is located within the Upper Missouri River Basin Closure Area, about 2 miles east of the town of Sun River, Montana. The Applicants have filed this change application to

comply with certain basin closure statutory requirements for mitigating groundwater appropriations that deplete surface water and cause adverse effects.

91. The water right to be changed (41K 200369) was filed for adjudication purposes in 1983 by Harold Poulsen and Christensen Ranch Co. Mr. Poulsen claimed two sources of water under one Statement of Claim - the Sun River and Mill Coulee Creek – asserting that the two sources served a total of 800 animal units (AU). Later on, the Montana Water Court generated an implied claim (41K 200370) for stock served by Mill Coulee Creek and retained Statement of Claim No. 41K 200369 specifically for stock use associated with the Sun River. Land properties associated with each source were later sold to different ownerships. The Applicants in this matter (Horners) acquired the portion of historical use that is associated with stock drinking from the Sun River, or that exclusively identified in the Basin 41K Preliminary Decree under 41K 200369.

92. For purposes of this present change proceeding, the Applicants assert their portion of historic use for stock purposes is predicated on a stocking rate of 460.8 AUs. Application file. Findings of Fact for the stocking rate are identified below in the Historic Use section.

CHANGE PROPOSAL

FINDINGS OF FACT

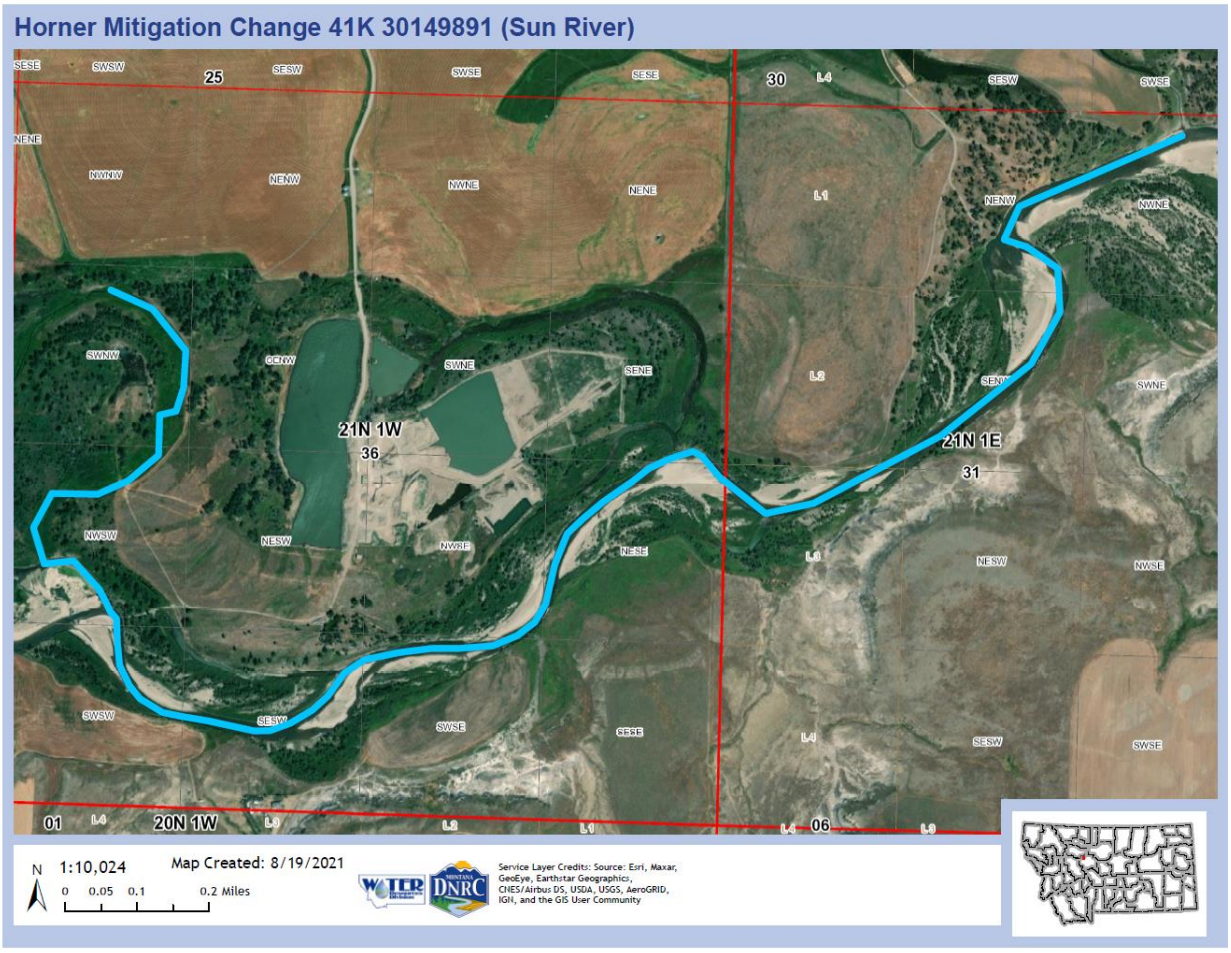
93. Applicants propose to temporarily add a purpose of Mitigation to Statement of Claim No. 41K 200369 to mitigate surface water depletions from the proposed groundwater appropriation under their permit application.[1] The requested groundwater appropriation has been filed concurrently under Application for Beneficial Water Use Permit No. 41K 30149892 (combined application process). The Permit application proposes to appropriate groundwater for Industrial purposes (gravel washing) at a flow rate of 400 gallons per minute (GPM) and diverted volume of up to 65.4 acre-feet (AF) annually. The estimated consumed volume associated with the

[1] Applicants proposed a temporary change period of 20 years, to conform to the 20-year period of their requested permit appropriation. However, per § 85-2-407, the Department is statutorily limited to approval of a change for a period not to exceed 10 years. Therefore, the Applicants will be required to apply for a renewal of their change authorization after 10 years, if granted in this proceeding.

groundwater appropriation is 1.84 AF, with the remaining volume (63.6 AF) returning to the aquifer. Depletions in the amount of 1.84 AF will accrue to the lower reach of Mill Coulee Creek and the Sun River, and generally in the Missouri River Basin within the basin closure area. The mitigation plan under this proposed change is to replace 1.84 AF of depletions by reducing the number of animal units associated with Statement of Claim No. 41K 200369 (the reduction in animal units and corresponding reduction in water usage will be equivalent to 1.84 AF). Under the Applicants proposed combined applications, there will be no net depletions to surface water.

94. The mitigation reach of stream (the depleted reach of the Sun River) is in the S2 Section 36, T21N, R1W and NWNE Section 31, T21N, R1E. The stream reach flows through the Applicants' southern portion of their property that mining activity occurs on and into the adjacent section. The gravel mining operation is permitted by the Montana Department of Environmental Quality Opencut Permit No. 1868. Application.

Following is a map of the mitigated reach of stream (Sun River).



§ 85-2-402, MCA, CHANGE CRITERIA

GENERAL CONCLUSIONS OF LAW

95. An applicant in a change proceeding must affirmatively prove all of the criteria in § 85-2-402, MCA. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:

> (2) Except as provided in subsections (4) through (6), (15), and (16) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:

(a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.

(b) Except for a change in appropriation right for instream flow to protect, maintain, or enhance streamflows to benefit the fishery resource pursuant to 85-2-436 or a temporary change in appropriation right authorization to maintain or enhance streamflows to benefit the fishery resource pursuant to 85-2-408 or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to 85-2-320, the proposed means of diversion, construction, and operation of the appropriation works are adequate.

(c) The proposed use of water is a beneficial use.

(d) Except for a change in appropriation right for instream flow to protect, maintain, or enhance streamflows to benefit the fishery resource pursuant to 85-2-436 or a temporary change in appropriation right authorization pursuant to 85-2-408 or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to 85-2-320, the applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water.

(e) If the change in appropriation right involves salvaged water, the proposed water-saving methods will salvage at least the amount of water asserted by the applicant.

The Department has jurisdiction to approve a change if the appropriator proves the applicable criteria in § 85-2-402, MCA. The requirements of Montana's change statute have been litigated and upheld in Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054, and the applicant has the burden of proof at all stages before the Department and courts. Hohenlohe v. DNRC, 2010 MT 203, ¶ 75; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, (2011) Pg. 8, *aff'd on other grounds*, Town of Manhattan v. DNRC, 2012 MT 81.

The burden of proof in a change proceeding is by a preponderance of evidence, which is "more probably than not." Hohenlohe ¶¶ 33, 35.

96. In a change proceeding and in accordance with well-settled western water law, other appropriators have a vested right to have the stream conditions maintained substantially as they existed at the time of their appropriations. Spokane Ranch & Water Co. v. Beatty (1908), 37 Mont. 342, 96 P. 727;); McDonald v. State (1986), 220 Mont. 519, 722 P.2d 598 (existing water right is the pattern of historic use; beneficial use is the basis measure and the limit); Robert E. Beck, 2 Waters and Water Rights § 14.04(c)(1) (1991 edition); W. Hutchins, Selected Problems in the Law of Water Rights in the West 378 (1942); *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991)(senior appropriator cannot change pattern of use to detriment of junior); see also Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo.,2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation). This right to protect stream conditions substantially as they existed at the time of appropriations was recognized in the Water Use Act in § 85-2-401, MCA. An applicant must prove that all other appropriators can continue to reasonably exercise their water rights under changes in the stream conditions attributable to the proposed change; otherwise, the change cannot be approved. Montana's change statute reads in part to this issue:

> 85-2-402. (2) … the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
>
> (a) *The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons* or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
>
> ....
>
> (13) A change in appropriation right contrary to the provisions of this section is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized change in appropriation right. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to change an appropriation right except in accordance with this section

(italics added).

97. Montana's change statute simply codifies western water law.[2] One commentator describes the general requirements in change proceedings as follows:

> Perhaps the most common issue in a reallocation [change] dispute is whether other appropriators will be injured because of an increase in the consumptive use of water. Consumptive use has been defined as "diversions less returns, the difference being the amount of water physically removed (depleted) from the stream through evapotranspiration by irrigated crops or consumed by industrial processes, manufacturing, power generation or municipal use." "Irrigation consumptive use is the amount of consumptive use supplied by irrigation water applied in addition to the natural precipitation which is effectively available to the plant."
>
> An appropriator may not increase, through reallocation [change] or otherwise, the actual historic consumptive use of water to the injury of other appropriators. In general, any act that increases the quantity of water taken from and not returned to the source of supply constitutes an increase in historic consumptive use. As a limitation on the right of reallocation, historic consumptive use is an application of the principle that appropriators have a vested right to the continuation of stream conditions as they existed at the time of their initial appropriation.
>
> Historic consumptive use varies greatly with the circumstances of use.

Robert E. Beck, 2 Water and Water Rights at § 14.04(c)(1)(b), pp. 14-50, 51 (1991 edition) .

In Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District (Colo. 1986), 717 P.2d 955, 959, the court held:

> [O]nce an appropriator exercises his or her privilege to change a water right … the appropriator runs a real risk of requantification of the water right based on actual

[2] Although Montana has not codified the law in the detail, Wyoming has, and the two states' requirements are virtually the same. Wyo. Stat. § 41-3-104 states:

> When an owner of a water right wishes to change a water right … he shall file a petition requesting permission to make such a change …. The change … may be allowed provided that the quantity of water transferred … shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.

Colorado follows a similar analysis under its requirement that a "change of water right, … shall be approved if such change, …will not injuriously affect the owner of or persons entitled to use water under a vested water right or a decreed conditional water right." §37-92-305(3)(a), C.R.S. E.g., Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002).

> historical consumptive use. In such a change proceeding a junior water right … which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right.

See also 1 Wells A. Hutchins, Water Rights and Laws in the Nineteen Western States (1971), at p. 624 (changes in exercise of appropriative rights do not contemplate or countenance any increase in the quantity of water diverted under the original exercise of the right; in no event would an increase in the appropriated water supply be authorized by virtue of a change in point of diversion, place of use, or purpose of use of water); A. Dan Tarlock, Law of Water Rights and Water Resources (2007), at § 5:78 ("*A water holder can only transfer the amount that he has historically put to beneficial use.…* A water holder may only transfer the amount of water consumed. The increment diverted but not consumed must be left in the stream to protect junior appropriators. Consumption is a function of the evapotranspiration of the appropriator's crops. Carriage losses are usually added to the amount consumed by the crops."); § 37-92-301(5), C.R.S. (in proceedings for a reallocation [change], it is appropriate to consider abandonment of the water right); Wyo. Stat. Ann. § 41-3-104.

Accordingly, the DNRC in administrative rulings has held that a water right in a change proceeding is defined by actual beneficial use, not the amount claimed or even decreed. E.g., *In the Matter of Application for Change Authorization No. G(W)028708-41I by Hedrich/Straugh/Ringer*, (DNRC Final Order 1991); *In the Matter of Application for Change Authorization No.G(W)008323-g76L by Starkel/Koester*, (DNRC Final Order 1992); *In The Matter of Application for Beneficial Water User Permit No 20736-S41H by the City of Bozeman and In the Matter of the Application to Sever or Sell Appropriation Water Right 20737-S41H*, Proposal for Decision and Memorandum at Pgs. 8-22 (Adopted by Final Order January 9,1985); see McDonald, supra (beneficial use is the measure, limit and basis, irrespective of greater quantity attempted to be appropriated); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067 (amount of water right is actual historic use); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, (2011) Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the

decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use, *citing* McDonald).

The Montana Supreme Court recently explained:

> An appropriator historically has been entitled to the greatest quantity of water he can put to use. Sayre v. Johnson, 33 Mont. 15, 18, 81 P. 389, 390 (1905). The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. In re Adjudication of Existing Rights to the Use of All Water, 2002 MT 216, ¶ 56, 311 Mont. 327, 55 P.3d 396; see also § 85-2-311(1)(d), MCA. This limitation springs from a fundamental tenet of western water law - that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 351, 96 P. 727, 731 (1908)….
>
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 43, 45; see also Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, (2011) Pg. 9.

98. The extent of the historic beneficial use must be determined in a change case. E.g., McDonald; Hohenlohe ¶ 43; Quigley; Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); *City of Bozeman* (DNRC), *supra* ("the doctrine of historic use gives effect to the implied limitations read into every decreed right that an appropriator has no right to waste water or to otherwise expand his appropriation to the detriment of juniors"). As a point of clarification, a claim filed for an existing water right in accordance with Mont. Code Ann. § 85-2-221 constitutes *prima facie* proof of the claim only for the purposes of the adjudication pursuant to Title 85, Chapter 2, Part 2. The claim does not constitute *prima facie* evidence of historical use for the purposes of a change in appropriation proceeding before the

Department under § 85-2-402, MCA. Importantly, irrigation water right claims are also not decreed with a volume and are, thus, limited by the Water Court to their "historic beneficial use." § 85-2-234, MCA. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, (2011) Pg. 11 (proof of historic use is required even where a water right is decreed).

99. The Department is within its authority to put a volume on a change authorization even where there is no volume on the Statement of Claim. The placement of a volume on the change authorization is not an "adjudication" of the water right. Hohenlohe ¶¶ 30-31.

100. Consumptive use of water may not increase when an existing water right is changed. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, (2011) Pg. 9; *In the Matter of Application to Change a Water Right No. 40M 30005660 By Harry Taylor II and Jacqueline R. Taylor*, (DNRC Final Order 2005); *In The Matter of Application to Change a Water Right No. 40A 30005100 by Berg Ranch Co./Richard Berg*, DNRC Proposal For Decision (2005) (Final Order adopted findings of fact and conclusions of law in proposal for decision*); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC*, DNRC Proposal For Decision (2003) (Final Order adopted findings of fact and conclusions of law in proposal for decision); see also Quigley. An increase in consumptive use constitutes a new appropriation. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review* (2011) Pg. 9 (*citing* Featherman v. Hennessy, (1911) 43 Mont. 310, 316-17).

In a change proceeding, the *consumptive* use of the historical right has to be determined:

> In a reallocation [change] proceeding, both the actual historic consumptive use and the expected consumptive use resulting from the reallocation [change] are estimated. Engineers usually make these estimates.
> With respect to a reallocation [change], the engineer conducts an investigation to determine the historic diversions and the historic consumptive use of the water subject to reallocation [change]. This investigation involves an examination of historic use over a period that may range from 10 years to several decades, depending on the value of the water right being reallocated [changed].

....
When reallocating [changing] an irrigation water right, the quantity and timing of historic consumptive use must be determined in light of the crops that were irrigated, the relative priority of the right, and the amount of natural rainfall available to and consumed by the growing crop.
....
Expected consumptive use after a reallocation [change] may not exceed historic *consumptive* use if, as would typically be the case, other appropriators would be harmed. Accordingly, if an increase in consumptive use is expected, the quantity or flow of reallocated [changed] water is decreased so that actual historic consumptive use is not increased.

2 Water and Water Rights at § 14.04(c)(1); see also, Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.). The Department can request consumptive use information from an applicant. Hohenlohe ¶¶ 51, 68-69.

101. Denial of a change in appropriation in whole or part does not affect the exercise of the underlying right(s). The water right holder can continue to exercise the underlying right, unchanged as it has historically. The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

102. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge. ARM 36.12.221(4).

Historic Use

FINDINGS OF FACT

103. The initial filing of Statement of Claim No. 41K 200369 for adjudication purposes included stock use from two sources of water (Sun River and Mill Coulee Creek) at a combined stocking rate of 800 animal units. The claim was later split into two separate Statements of Claim by the Water Court, although the Water Court did not explicitly identify the number of stock associated with each water right.[3] Water right records.

104. For purposes of this change process the Applicants calculate the stock numbers associated with their parcel and water right number 41K 200369, which includes direct from source stock use from the Sun River, at 460.8 animal units (AU). The Applicants' dissection of the initial-claimed 800 AUs (stocking units now under two distinct property owners) is based on the ratio of acreage between their ownership parcel(s), and the parcel owned by the other claimant. Applicants assert the historical volume associated with their water right is 15.48 AF, based on a volume of 30 gallons per day per AU and 460.8 AUs. Application. The Applicants' method of calculation is reasonable and included in the application materials.

105. The Department finds the historical volume associated with 41K 200369 to be 15.48 AF. The historical use elements of the water right are as noted below in Table 2.

[3] At the time that 41K 200369 was filed for adjudication purposes, one property owner held all land associated with the places of use, but the parcels associated with the places of use were not adjacent to one another and two distinct streams were claimed as sources. At a later date the Water Court executed a split of the original claim by generating an implied claim with a number of 41K 200370. The implied claim asserted Mill Coulee Creek as its source, and the existing claim (41K 200369) maintained the Sun River as its source. The original claimant then sold the properties associated with both the original and implied claims to different owners. The parcels associated with each claim and source are not conjoined.

Table 2: Historic Use of Statement of Claim No. 41K 200369

Water Right No.	Source	Purpose	Volume	Priority Date	Point of Diversion & Place of Use	Period of Diversion
41K 200369	Sun River	Stock (Direct from Source)	15.48 AF	Feb 28, 1940	S2 Sec 36, T21N, R1W	Jan 1 through Dec 31

CONCLUSIONS OF LAW

106. Applicant seeks to change existing water rights represented by its Water Right Claims. The "existing water rights" in this case are those as they existed prior to July 1, 1973, because no changes could have been made to those rights after that date without the Department's approval. § 85-2-402(1), MCA; Royston, supra; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 7; cf. General Agriculture Corp. v. Moore (1975), 166 Mont. 510, 534 P.2d 859 (limited exception for perfection). Thus, the focus in a change proceeding is what those rights looked like and how they were exercised prior to July 1, 1973. E.g., Matter of Clark Fork River Drainage Area (1992), 254 Mont. 11, 17, 833 P.2d 1120; 85-2-102(12)("Existing right" or "existing water right" means a right to the use of water that would be protected under the law as it existed prior to July 1, 1973). An applicant can change only that to which it has a perfected right. E.g., McDonald, supra; Quigley, supra; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 9 (the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions, *citing* Featherman v. Hennessy, (1911) 43 Mont. 310, and Quigley v. McIntosh, (1940) 110 Mont. 495); see also In re Application for Water Rights in Rio Grande County 53 P.3d 1165, 1170 (Colo. 2002) (while the enlargement of a water right, as measured by historic use, may be injurious to other rights, it also simply does

not constitute a permissible "change" of an existing right); Robert E. Beck, 2 Water and Water Rights at § 16.02(b) at p. 271 (issues of waste and historic use, as well as misuse … properly be considered by the administrative official or water court when acting on a reallocation application," (citations omitted)); *In the Matter of Application for Change in Appropriation of Water Right No. 1339988-40A, 1339989-40A, and 50641-40A by Careless Creek Ranch* (DNRC Final Order 1988)(where there is water at new point of diversion, more often than not purpose of change is to pick up that extra water, application must be made for a new water right to cover the extra water; it cannot be appropriated under the guise of a change in the old right).

107. The Department as fact finder in a change proceeding must have the required information to evaluate historic use of a water right to determine whether the change will result in expansion of the original right or adversely affect water users. The Department cannot determine whether there will be adverse effect to other appropriators from a different use of water until it knows how the water has been historically used, including the pattern of use. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg.13 (upholding ARM 36.12.1902, as reflecting basic water law principles).

The requirement that a water user establish the parameters and pattern of use of a water right through evidence of historic use is a fundamental principle of Montana water law that serves to ensure that a change does not expand a water right (i.e. bootstrap a new use with a senior priority date) or adversely affect other water users. Evidence of historic use serves the important function of protecting other water users who have come to rely upon maintaining surface and ground water conditions for their livelihood. Id. at Pg. 14; *In the Matter of Change Application No. 43D-30002264 by Chester and Celeste Schwend* (DNRC Final Order 2008)(applicant must provide evidence on actual historic use of water right regardless of decree; statement that "we will not be using any more water than was used before" is not sufficient).

108. Water Resources Surveys were authorized by the 1939 legislature. 1939 Mont. Laws Ch. 185, § 5. Since their completion, Water Resources Surveys have been invaluable evidence in water right disputes and have long been relied on by Montana courts. In re Adjudication of

Existing Rights to Use of All Water in North End Subbasin of Bitterroot River Drainage Area in Ravalli and Missoula Counties (1999), 295 Mont. 447, 453, 984 P.2d 151, 155 (Water Resources Survey used as evidence in adjudicating of water rights); Wareing v. Schreckendgust (1996), 280 Mont. 196, 213, 930 P.2d 37, 47 (Water Resources Survey used as evidence in a prescriptive ditch easement case); Olsen v. McQueary (1984), 212 Mont. 173, 180, 687 P.2d 712, 716 (judicial notice taken of Water Resources Survey in water right dispute concerning branches of a creek).

109. The Department has adopted a rule providing for the calculation of historic consumptive use where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902.

If an applicant seeks more than the historic consumptive use as calculated by ARM 36.12.1902, the applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. E.g., Application for Water Rights in Rio Grande County 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); Orr v. Arapahoe Water and Sanitation Dist. 753 P.2d 1217, 1223 -1224 (Colo., 1988)(historical use of a water right could very well be less than the duty of water); Weibert v. Rothe Bros., Inc., 200 Colo. 310, 317, 618 P.2d 1367, 1371 - 1372 (Colo., 1980) (historical use could be less than the optimum utilization "duty of water").

110. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. E.g., *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, supra. The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full-service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location of diversion, it is essential that the change also not enlarge an existing right. Trail's End Ranch, L.L.C. v. Colorado

Div. of Water Resources 91 P.3d 1058, 1063 (Colo., 2004) (*citing* Application for Water Rights in Rio Grande County, 53 P.3d at 1168 and Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1147 (Colo., 2001).

111. Absent quantification of annual volume historically consumed, no protective condition limiting annual volume delivered can be placed on a Change Authorization, and without such a condition, the evidence of record will not sustain a conclusion of no adverse effect to prior . . . appropriators*." In the Matter of the Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Keith and Alice Royston*, COL No. 8 (DNRC Final Order 1989), *affirmed* (1991), 249 Mont. 425, 428, 816 P.2d 1054, 1057; *In the Matter of the Application of Beneficial Water Use Permit Number 41H 30003523 and the Application for Change No. 41H 30000806 by Montana Golf Enterprises, LLC.*, DNRC Proposal for Decision (November 19, 2003) (proposed decision denied change for lack of evidence of historical use; application subsequently withdrawn); see also Hohenlohe ¶¶ 43, 45; Application for Water Rights in Rio Grande County (2002), supra; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, supra.

112. The Department has the authority to consider waste in determining a volume for change in a water right.

> *The Department retains the discretion to take into account reasonable or wasteful use and to amend or modify a proposed change of use application according to those determinations. See Bostwick, 2009 MT 181, ¶ 21, 351 Mont. 26, 208 P.3d 868.*

Hohenlohe ¶ 71.

113. The Department finds that the Applicants have proven by a preponderance of the evidence the historic use of Water Right Claim No. 41K 200369. The amount of water associated with Stock use is 30 gallons per day per AU (460.8 AUs), or 15.48 AF. (FOFs 103-105)

Adverse Effect:

FINDINGS OF FACT

114. Applicants propose to change Statement of Claim No. 41K 200369 (existing Stock water right) by adding a purpose of Mitigation. A volume of 1.84 AF will be changed from Stock to Mitigation to offset depletions caused by Applicants' permit appropriation under 41K 30149892. Applicants will reduce their stocking rate (number of stock watering from the Sun River) by 55 AUs. Water that was previously consumed by the 55 AUs will be left instream throughout the year to fully offset the consumed volume associated with their groundwater appropriation for Industrial use.

115. The location of the mitigated reach of stream is the same reach that will be depleted by the groundwater appropriation. Therefore, there will be no net impact to other water users.

116. The Applicants' plan to prevent adverse effects includes the following:

- Assurance of a reduction in animal units grazing the property and utilizing water from the Sun River.
- A commitment to honor all valid calls on the source. That is, the Applicants will cease appropriations under this mitigation water right (41K 30149891) AND groundwater appropriations associated with 41K 3014982 (concurrent groundwater application) if a valid call is made on this mitigation water right (February 28, 1940 priority date).

117. Based on the Applicants' plans, the Department finds there will be no adverse effects on existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued.

CONCLUSIONS OF LAW

118. The Applicant bears the affirmative burden of proving that proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation. § 85-2-402(2)(a), MCA. Royston, supra. It is the

applicant's burden to produce the required evidence. *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

119. Prior to the enactment of the Water Use Act in 1973, the law was the same in that an adverse effect to another appropriator was not allowed. Holmstrom Land Co., Inc., v. Newlan Creek Water District (1979), 185 Mont. 409, 605 P.2d 1060, *rehearing denied*, (1980), 185 Mont. 409, 605 P.2d 1060, *following* Lokowich v. Helena (1913), 46 Mont. 575, 129 P. 1063; Thompson v. Harvey (1974), 164 Mont. 133, 519 P.2d 963 (plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley (1972), 159 Mont. 72, 495 P.2d 186 (appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale (1909), 38 Mont. 302, 100 P. 222 (successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); Gassert v. Noyes (1896), 18 Mont. 216, 44 P. 959 (after the defendant used his water right for placer mining purposes the water was turned into a gulch, whereupon the plaintiff appropriated it for irrigation purposes; the defendant then changed the place of use of his water right, resulting in the water no longer being returned to the gulch - such change in use was unlawful because it absolutely deprived the plaintiff of his subsequent right).

The cornerstone of an evaluation of adverse effect to other appropriators is the determination of historic use of water. One cannot determine whether there is adverse effect to another appropriator until one knows what the historic water right is to be changed. It is a fundamental part of Montana and western water law that the extent of a water right is determined by reference to the historic beneficial use of the water right. McDonald; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review* (2011) Pg.13; *City of Bozeman* (DNRC), supra; Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002). The Montana Supreme Court has explained:

> An appropriator historically has been entitled to the greatest quantity of water he can put to use. Sayre v. Johnson, 33 Mont. 15, 18, 81 P. 389, 390 (1905). The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. In re Adjudication of Existing Rights to the Use of All Water, 2002 MT 216, ¶ 56, 311 Mont. 327, 55 P.3d 396; see also § 85-2-311(1)(d), MCA. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 351, 96 P. 727, 731 (1908)….
>
> The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the "amount historically consumed" and the water that re-enters the stream as return flow…
>
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe ¶¶ 43-45.

The Colorado Supreme Court has repeatedly addressed this same issue of historic use and adverse effect. E.g., Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.1999); Orr v. Arapahoe Water and Sanitation Dist., 753 P.2d 1217, 1223 (Colo.1988). The Colorado Supreme Court has consistently explained:

> "A classic form of injury involves diminution of the available water supply that a water rights holder would otherwise enjoy at the time and place and in the amount of demand for beneficial use under the holder's decreed water right operating in priority." (citations omitted) . . .
>
> … it is inherent in the notion of a "change" of water right that the property right itself can only be changed and not enlarged. (citation omitted). The appropriator of native water may not enlarge an appropriation without establishing all of the elements of an

> independent appropriation, which will necessarily have a later priority date (citation omitted) …
>
> … diversions are implicitly limited in quantity by historic use at the original decreed point of diversion…
>
> …we have explained this limitation by noting that "over an extended period of time a pattern of historic diversions and use under the decreed right at its place of use will mature and become the measure of the water right for change purposes." (citation omitted). The right to change a point of diversion is therefore limited in quantity by the historic use at the original point of diversion. (citations omitted) "Thus, a senior appropriator cannot enlarge the historical use of a water right by changing the point of diversion and then diverting from the new location the full amount of water decreed to the original point of diversion, even though the historical use at the original point of diversion might have been less than the decreed rate of diversion."
>
> FN9. The term "historic use" refers to the "historic consumptive use," (citations omitted).

Application for Water Rights in Rio Grande County, 53 P.3d at 1169-1170.

120. Consumptive use of water may not increase when an existing water right is changed. E.g., Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, (2011) Pg.9; *In the Matter of Application to Change a Water Right No. 40M 30005660 by Harry Taylor II And Jacqueline R. Taylor*, (DNRC Final Order 2005); *In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC,* DNRC Proposal For Decision adopted by Final Order (2003). Applicant must provide evidence of historical amount consumed and the amount to be consumed under the proposed change. *In the Matter of the Application of Beneficial Water Use Permit Number 41H 30003523 and the Application for Change No. 41H 30000806 by Montana Golf Enterprises, LLC.*, DNRC Proposal for Decision (2003) (application subsequently withdrawn); *In the Matter of Application to Change A Water Right No. 43B 30002710 by USA (Dept. of Agriculture – Forest Service*) (DNRC Final Order 2005); *In the Matter of Application No. 76H-30009407 to Change Water Right Nos. 76H-108772 and 76H-1-8773 by North Corporation* (DNRC Final Order 2008*).*

#It is well settled in Montana and western water law, that once water leaves the control of the appropriator whether through seepage, percolating, surface, or waste waters," and reaches a water course, it is subject to appropriation. E.g., Rock Creek Ditch & Flume Co. v. Miller (1933), 93 Mont. 248, 17 P.2d 1074, 1077; Newton v. Weiler (1930), 87 Mont. 164, 286 P. 133; Popham v. Holloron (1929), 84 Mont. 442, 275 P. 1099, 1102; Galiger v. McNulty (1927) 80 Mont. 339, 260 P. 401; Head v. Hale (1909), 38 Mont. 302, 100 P. 222; Alder Gulch Con. Min. Co. v. King (1886), 6 Mont. 31, 9 P. 581; Doney, *Montana Water Law Handbook* (1981) [hereinafter Doney] p.22 (if return flows not part of original appropriation then it is available for appropriation by others); see also Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185. An intent to capture and reuse return flows must be manifested at the time of the appropriation. E.g., Rock Creek Ditch and Flume, 17 P.2d at 1080; Albert Stone, *Montana Water Law* (1994) p. 84. This is consistent with the cornerstone of the prior appropriation doctrine that beneficial use is the basis, the measure and limit of a water right. E.g., McDonald v. State (1986), 220 Mont. 519, 722 P.2d 598; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396. Return flows are not part of the water right of the appropriator changing their water right and an appropriator changing their water right is not entitled to return flows in a change in appropriation. Generally, return flow is water that is not consumed or is lost to the system. See also, Doney, p. 21.

The Montana Supreme Court also recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶2 2, 31,43, *citing* Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; see discussion in Hohenlohe, supra.

121. The analysis of return flow is a critical component of a change in appropriation and specifically whether a change will cause adverse effect to another appropriator. A change can

affect return flow patterns and timing, affecting other water users. E.g., I*n the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991). An applicant for a change in appropriation must analyze return flows (amount, location, and timing) to prove that the proposed change does not adversely affect other appropriators who may rely on those return flows as part of their water supply to exercise their water rights. E.g., Royston, supra; *In the Matter of Change Application No. 43D-30002264 by Chester and Celeste Schwend* (DNRC Final Order 2008) (applicant must show that significant changes in timing and location of historic return flow will not be adverse effect.) The level of analysis of return flow will vary depending on the nature of the change application. Hohenlohe ¶¶ 45-46, 55-56.

122. The Applicant has proven by a preponderance of the evidence that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. § 85-2-402(2)(b), MCA. (FOFs 114-117)

Adequate Diversion

FINDINGS OF FACT

123. The purpose of the requested change is to offset or mitigate up to 1.84 AF of surface water depletions caused by a proposed groundwater appropriation. The stocking rate, or animal units, associated with the underlying water right (41K 200369) will be reduced from 461 AUs to 406 AUs (a reduction of 55 AUs), which will result in a corresponding reduction in water usage equivalent to 1.84 AF. 1.84 AF will be left in the Sun River and there will be no diversion associated with the mitigation purpose. Application.

124. Pursuant to § 85-2-402 (2)(b), MCA, an Applicant is not required to prove adequacy of the diversion works for changes in appropriation rights for the purpose of mitigation, however, the general mitigation plan has been described in this section for information purposes. A

reduced number of animal units will continue watering from the Sun River as they historically have.

CONCLUSIONS OF LAW

125. Pursuant to § 85-2-402 (2)(b), MCA, except for a change in appropriation right for instream flow to protect, maintain, or enhance stream flows to benefit the fishery resource pursuant to § 85-2-436, MCA, or a temporary change in appropriation right authorization to maintain or enhance streamflows to benefit the fishery resource pursuant to § 85-2-408, MCA, or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to § 85-2-320,MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. The adequate means of diversion statutory test merely codifies and encapsulates the common law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA; see also, *In the Matter of Application to Change a Water Right No. G129039-76D by Keim/Krueger* (DNRC Final Order 1989)(whether party presently has easement not relevant to determination of adequate means of diversion); *In the Matter of Application for Beneficial Water Use Permit No. 69141-76G by Silver Eagle Mining* (DNRC Final Order 1989) (collection of snowmelt and rain in lined ponds considered adequate means of diversion); *In the Matter for Application to Change a Water Right No. 101960-41S by Royston* (DNRC Final Order 1989)(irrigation system is designed for flow rates of 750 GPM, and maximum usage allowed during non-high water periods, is 144-247 GPM, and the evidence does not show that the system can be operated at the lower flow rates; diversion not adequate), *affirmed*, Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054; *In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002)(information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by

licensed engineer adequate); *In the Matter of Application for Beneficial Water Use Permit No. 43B-30002710 by USDA* (DNRC Final Order 2005) (specific ditch segments would be adequate after completion of maintenance and rehabilitation work).

Adequate diversions can include the requirement to bypass flows to senior appropriators. E.g., *In the Matter of Application for Beneficial Water Use Permit No. 61293-40C by Goffena* (DNRC Final Order 1989) (design did not include ability to pass flows, permit denied).

126. Pursuant to § 85-2-402(2)(b), MCA, the Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation works are adequate because this application involves (iii) a change in appropriation right pursuant to § 85-2-420, MCA, for mitigation or marketing for mitigation. (FOFs 123-124)

Beneficial Use

FINDINGS OF FACT

127. Applicants propose to add a purpose of Mitigation to their existing stock water right. The volume of water associated with the Mitigation purpose is 1.84 AF. After the change is implemented, beneficial use will be comprised of 1.84 AF for Mitigation, and 13.64 AF for Stock purposes. The Stock volume is based on a standard volume of 30 gallons per day per AU. The Mitigation volume represents the amount of water consumed by 55 AUs, which are the number of AUs required to be reduced for the mitigation plan to be effective.[4] Department Technical Report.

128. 1.84 AF is the volume of water required to offset depletions from the proposed permit appropriation. The Department finds the proposed additional purpose of Mitigation, and the existing purpose of Stock, to be beneficial uses of water.

[4] Depletions to the Sun River vary slightly by month. The average stock reduction rate calculates to be 55 AUs, based on 30 gallons per day per AU.

CONCLUSIONS OF LAW

129. Under the change statute, § 85-2-402(2)(c), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. An appropriator may appropriate water only for a beneficial use. §§ 85-2-301 and 311(1)(d), MCA.

130. The analysis of the beneficial use criterion is the same for change authorizations under § 85-2-402, MCA, and new beneficial permits under § 85-2-311, MCA. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; Quigley; Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 3 (citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); *In the Matter of Application for Beneficial Water Use Permit No. 76H-84577 by Thomas and Janine Stellick*, (DNRC Final Order 1995)(permit denied because no evidence in the record that the amount of water needed for fish and wildlife; absence of evidence of waste does not meet the standard of proof); *In the Matter of Application No. 40A-108497 by Alex Matheson*, DNRC Proposal for Decision adopted by Final Order (2000) (application denied as to fishery and recreation use for lack of proof); *In the Matter of Application for Beneficial Water Use Permit No. 76LJ-115-831 by Benjamin and Laura Weidling*, (DNRC Final Order 2003), *aff'd on other grounds*, In the Matter of Application for Beneficial Water Use Permit No. 76LJ-115-83100 by Benjamin and Laura Weidling and No. 76LJ-1158300 by Ramona S. and William N. Nessly, *Order on Motion for Petition for Judicial Review*, Cause No. BDV-2003-100, Montana First Judicial District (2004) (fish and wildlife use denied for lack of proof); *In the Matter of Application for Beneficial Water Use Permit 76LJ 30008762 by Vinnie J & Susan N Nardi*, DNRC Proposal for Decision adopted by Final Order (2006); Statement of Opinion, *In the Matter of Beneficial Water Use Permit No. 41H-30013678 by Baker Ditch Company* (June 11, 2008)(change authorization

denied - no credible evidence provided on which a determination can be made of whether the quantity of water requested is adequate or necessary to sustain the fishery use, or that the size or depth of the ponds is adequate for a fishery); *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 By Dee Deaterly*, DNRC Final Order (2007), *aff'd on other grounds*, Deaterly v. DNRC et al., Cause No. BDV-2007-186, Montana First Judicial District, *Nunc Pro Tunc Order on Petition for Judicial Review* (2008) (permit denied in part because of failure to support quantity of water needed for pond); *In The Matter of Change Application No. 43D-30002264 by Chester and Celeste Schwend* (DNRC Final Order 2008) (when adding new water rights to land already irrigated by other water rights, applicant must show that all of the proposed rights together are needed to irrigate those lands);.

The Department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. §85-2-312, MCA; see also, McDonald; Toohey. Waste is defined to include the "application of water to anything but a beneficial use." § 85-2-102(23), MCA. An absence of evidence of waste does not prove the amount requested is for a beneficial use. E.g., *Stellick*, supra.

131. It is the Applicant's burden to prove the required criteria. Royston. A failure to meet that affirmative burden does not mean the criterion is met for lack of contrary evidence. E.g., *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

132. Applicants propose to use water for Mitigation and Stock purposes, which are recognized beneficial uses. § 85-2-102(5), MCA. Applicants have proven by a preponderance of the evidence that 1.84 AF for Mitigation and 13.64 AF for Stock are beneficial uses and are the amount needed to sustain the beneficial uses. § 85-2-402(2)(c), MCA. (FOFs 127-128)

Possessory Interest

FINDINGS OF FACT

133. Per § 85-2-402(2)(d)(iii), MCA, the Applicants are not required to prove the possessory interest criteria in relation to the mitigation purpose. Otherwise, the Applicants signed and had the affidavit on the application form notarized affirming they have possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use when used for Stock purposes. Application.

CONCLUSIONS OF LAW

134. Pursuant to § 85-2-402(2)(d), MCA, except for a change in appropriation right for instream flow to protect, maintain, or enhance streamflows to benefit the fishery resource pursuant to § 85-2-436, MCA, or a temporary change in appropriation right authorization pursuant to § 85-2-408, MCA, or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to § 85-2-320, MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water.

135. Pursuant to ARM 36.12.1802:

> (1) An applicant or a representative shall sign the application affidavit to affirm the following:
>
> (a) the statements on the application and all information submitted with the application are true and correct; and
>
> (b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

(2) If a representative of the applicant signs the application form affidavit, the representative shall state the relationship of the representative to the applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.

(3) The department may require a copy of the written consent of the person having the possessory interest.

136. The Applicants have proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use for stock use. § 85-2-402(2)(d), MCA. (FOF 133)

137. Pursuant to § 85-2-402(2)(d), MCA, the Applicant is not required to prove that they have a possessory interest in the property where the water is to be put to beneficial use because this application involves (iii) a change in appropriation right pursuant to § 85-2-420, MCA, for mitigation or marketing for mitigation. (FOF 133)

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Order, the Department preliminarily determines that this Combined Application for Beneficial Water Use Permit No. 41K 30149892 and Application to Change an Existing Non-Irrigation Water Right No. 41K 30149891 should be **GRANTED.**[5]

BENEFICIAL WATER USE PERMIT

Applicants are authorized to divert groundwater for Industrial purposes, for a temporary period of 20 years, by means of a pump from an inactive gravel pit, from March 15 through December 1, at a flow rate of 400 GPM up to 65.4 AF in volume. 1.84 AF out of the 65.4 AF diverted will be consumed (the remaining, unconsumed volume, or 63.6 AF, will return to the source aquifer). The point of diversion is in the SESENW Section 36, T21N, R1W, and the

[5] The requested appropriation is for a temporary period of 20 years. If the Department's final order authorizes the appropriation, the Permit shall expire upon the 20-year period. The Department may not grant a temporary change authorization exceeding 10 years, and therefore the appropriator will need to seek a renewal of the change after 10 years.

place of use is in the NWSE Section 36, T21N, R1W, Cascade County. The gravel mining operation is permitted under Montana Department of Environmental Quality Opencut Permit No. 1868.

The source aquifer is the Quaternary alluvial sediments of the Sun River Valley, and groundwater in the aquifer is hydraulically connected to surface water. The appropriation of groundwater will deplete the lower reach of Mill Coulee Creek and the Sun River, generally in the S2 Section 36, T21N, R1W and into the NWNE Section 31, T21N, R1E. Change Application No. 41K 30149891 will be used to mitigate or offset depletions within the affected stream reach. Stock numbers (animal units) associated with water right number 41K 200369 will be reduced from 461 AUs to 406 AUs to offset the amount of surface water depleted in the Sun River (1.84 AF).

CONDITIONS

The application will be subject to the following conditions, limitations or restrictions.

1. Diversion under the Permit may not commence until the mitigation or aquifer recharge plan described in this decision is legally implemented. Diversion under the Permit must stop if the mitigation or aquifer recharge plan as herein required in amount, location and duration ceases in whole or in part.
2. The appropriator shall install a department-approved measuring device in the supply line from the diversion point to the gravel wash plant. The location of the measuring device must be approved by the department. Water must not be diverted until the required measuring device is in place and operating. The appropriator shall keep a written monthly record of the volume of all water diverted under the water right. The volume diverted by the pumping system shall not exceed 65.4 acre-feet annually.

Records of appropriations shall be submitted by December 31 of each year and upon request at other times during the year. Failure to submit records may be cause for revocation of the

authorization. The appropriator shall maintain the measuring device so it always operates properly and measures the flow rate and volume of water accurately.

Submit records to:
Lewistown Water Resources Regional Office
613 NE Main St, Suite E
Lewistown, MT 59457
Phone: (406)538-7459

AUTHORIZATION OF CHANGE IN APPROPRIATION RIGHT

Applicants are authorized to add a purpose of Mitigation to Statement of Claim No. 41K 200369 for a temporary period of 10 years, to offset depletions to surface water incurred under Application for Beneficial Water Use Permit No. 41K 30149892. The volume of water authorized for Mitigation purposes is 1.84 AF, and the volume of water used for Stock purposes is 13.64 AF. The place of use for Mitigation is the Sun River from the S2 Section 36, T21N, R1W to the NWNE Section 31, T21N, R1E. The place of use for Stock is the S2 Section 36, T21N, R1W. The period of diversion/use for Mitigation and Stock is January 1 through December 31.

To execute the mitigation plan Applicants shall reduce the number of stock drinking from the Sun River in the S2 Section 36, T21N, R1W, by 55 animal units (AUs), from 461 AUs to 406 AUs. The following table displays the amount of water specifically associated with the Mitigation purpose by month. The amounts identified represent the volume of monthly depletions required to be offset by reducing stock numbers (an annual average of 55 AUs).

Volume Required to Mitigate Depletions to Sun River Downstream of Mill Coulee Creek

Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Vol (AF)	0.12	0.09	0.09	0.12	0.15	0.17	0.18	0.18	0.19	0.19	0.19	0.17

Total Annual Mitigation Volume = 1.84 AF

NOTICE

This Department will provide public notice of this Combined Application and the Department's Preliminary Determination to Grant pursuant to §§ 85-2-307, MCA. The Department will set a deadline for objections to this Combined Application pursuant to §§ 85-2-307, and -308, MCA. If this Combined Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Combined Application as herein approved. If this Combined Application receives a valid objection, the Combined Application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to a combined application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the combined application, the department will grant the combined application subject to conditions necessary to satisfy applicable criteria based on the preliminary determination.

DATED this 15th day of September 2021.

/Original signed by Scott Irvin/
Scott Irvin, Regional Manager
Lewistown Regional Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 15th day of September 2021, by first class United States mail.

JOE AND GLENDA HORNER
3115 RAINBOW DAM RD
GREAT FALLS, MT 59404

_____ _____

NAME DATE